

TECH DATA SHEET

20B GALVANISED LADDER

Cable Laying Depth: 109mm

Loading Data:

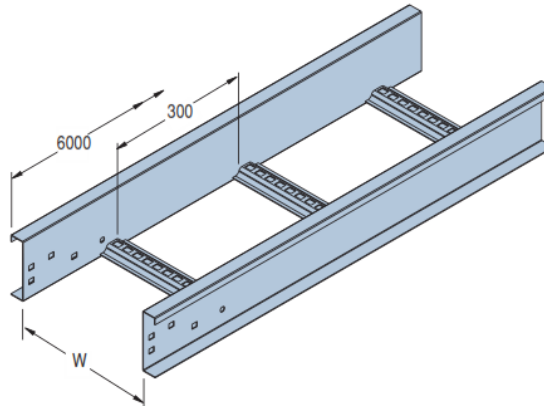
Basic Load Capacity
136kg/lin.m on 6m span

Length: 6m

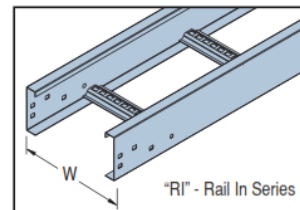
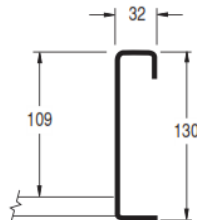
Rung Spacing: 300mm nominal

Standard Finish: Hot Dipped Galvanised

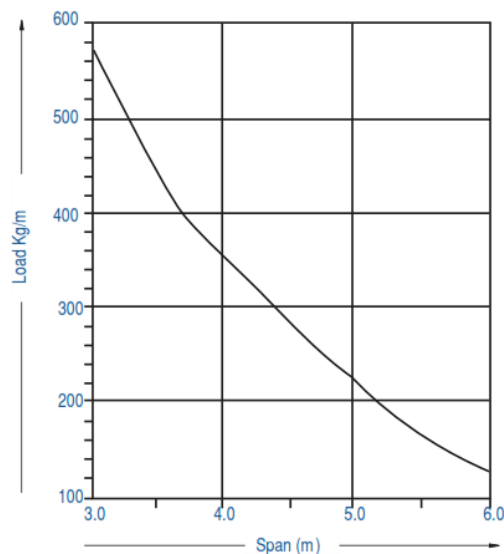
Also available in Stainless Steel Grade 316
(part no. LUK)



Dim "W"	Type	Part No.
150	20B	LEK101
300	20B	LEK103
450	20B	LEK104
600	20B	LEK106
900	20B	LEK109
150	20B-RI	LEK101R
300	20B-RI	LEK103R
450	20B-RI	LEK104R
600	20B-RI	LEK106R
900	20B-RI	LEK109R

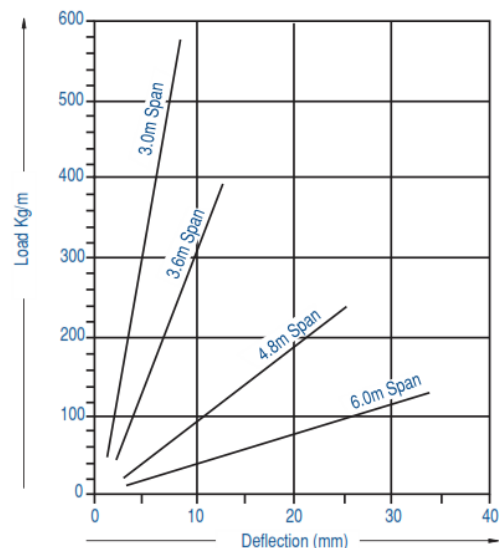


Allowable Load Graph



Allowable loads are determined generally in accordance with NEMA Standard VE1 and verified by testing.
Safety Factor = 1.5 on collapse load for single span.

Deflection Graph



Deflections shown apply to the end-bays (ie. worst case) of a continuous ladder run. To find deflection of a single span, multiply by 2.5.



Customer service center

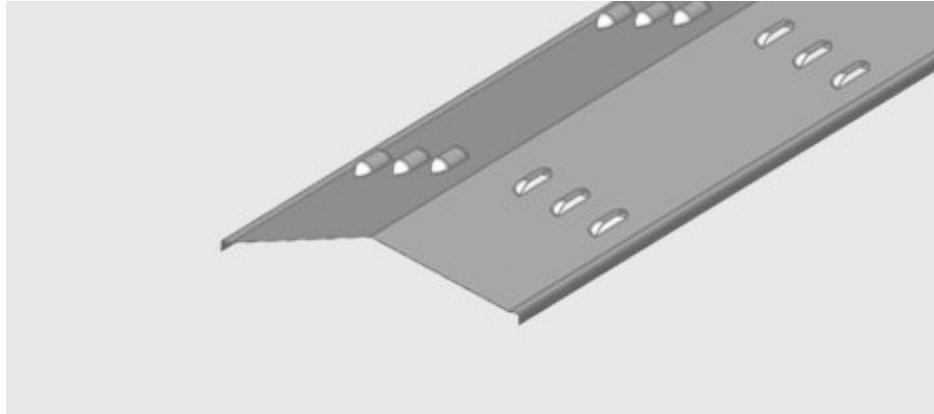
Phone: 1300 725 877

Fax: 1300 112 300

www.unistrut.com.au

TECH DATA SHEET

20B/20C 15 DEGREE PEAKED COVERS x 3m LONG TG



PART NUMBER	DESCRIPTION	Nom Width	Actual Width	Peak Height	Thickness	Length
LEK6013P1V	15D PKD VNT COVER 3m SS	150mm	215mm	24mm	0.7mm	3m
LEK6033P1V	15D PKD VNT COVER 3m SS	300mm	365mm	44mm	0.7mm	3m
LEK6043P1V	15D PKD VNT COVER 3m SS	450mm	515mm	64mm	0.7mm	3m
LEK6063P1V	15D PKD VNT COVER 3m SS	600mm	665mm	84mm	0.7mm	3m

LADDER AND TRAY COVERS

Covers are normally specified where protection is required:

1. To safeguard against damage to cable and insulation from falling objects—dropped tools, discarded cigarettes, parks or solid materials.
2. Covers protect cable insulation and fixings (plastic ties etc.) from harmful effects of ultra-violet light or weathering deterioration.
3. In areas where high levels of airborne particles are present, covers prevent accumulation of dust or other debris on cables, which may cause heat build-up, fire hazards or absorb moisture, which may shorten life of installation.

AVAILABILITY

Standard covers are available for all Unistrut® cable ladder systems and UNI-TRAY® systems. Standard length is 3 meters. Flat, peaked or ventilated covers are available by special order.

MATERIAL

TG TRUGALV™

Date: March, 2017

Subject: LEE91; LEG91; LEK91; LEL91 COVER CLIP

From: Unistrut Engineering

General

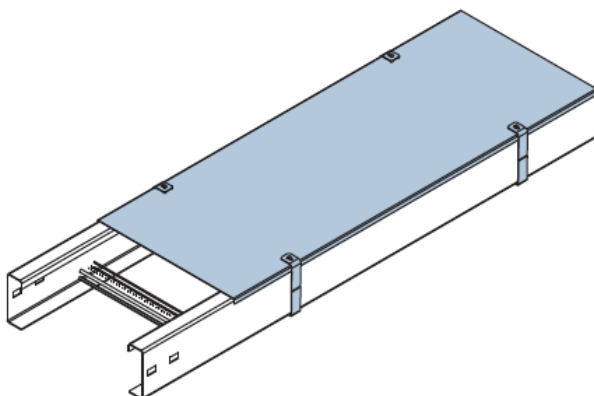
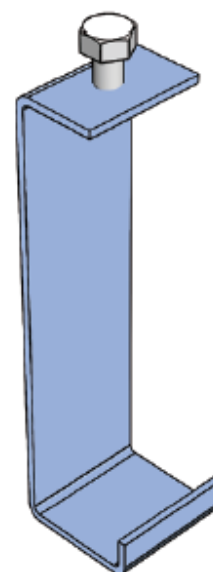
Covers are retained in position by means of cover clips as illustrated. Manufactured from hot dipped galvanised carbon steel, the cover clips are very quickly installed and are also easily removed or replaced at a later date.

One size of clip for each ladder system suits both straight and accessory covers.

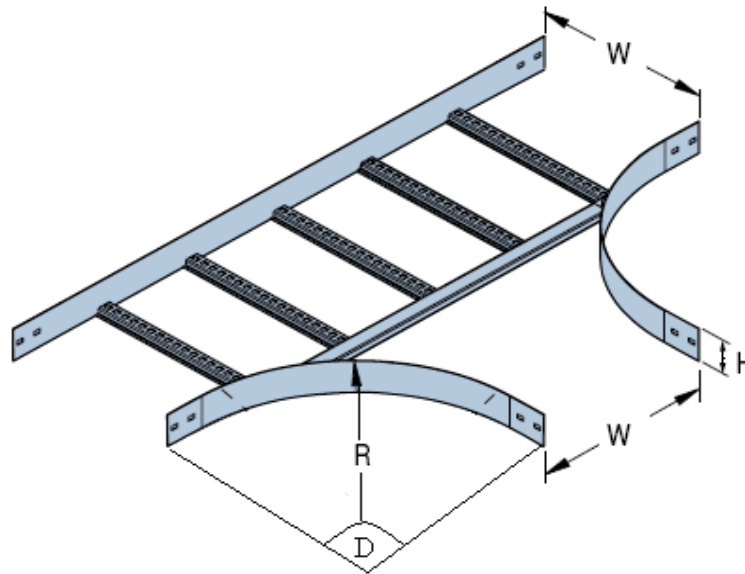
The cover clips are suited to be used on standard rail in & rail out cable ladders and on conveyor ladders.

HDG CLAMPS

Type	Part No.
12B	LEE91
16A	LEG91
20B	LEK91
20C	LEL91



20C CABLE LADDER "TEE" DATA SHEET



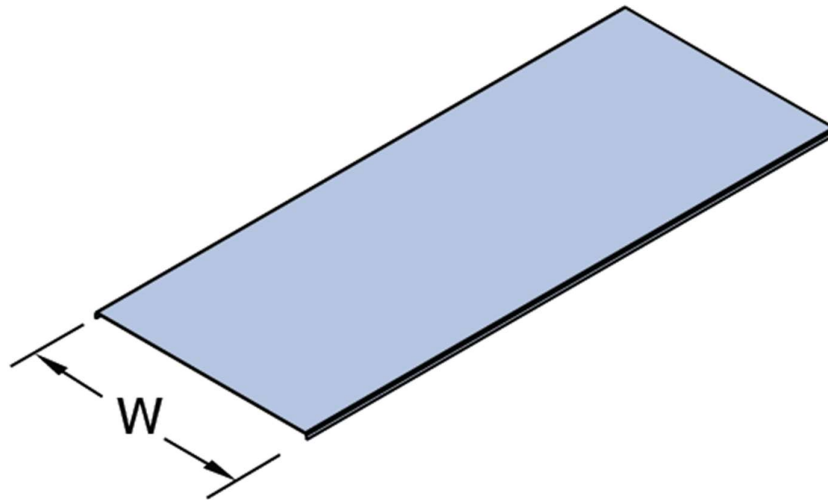
HDG		SS316	
PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
LEL191	20C TEE 150W HDG	LUL191	20C TEE 150W SS316
LEL193	20C TEE 300W HDG	LUL193	20C TEE 300W SS316
LEL194	20C TEE 450W HDG	LUL194	20C TEE 450W SS316
LEL196	20C TEE 600W HDG	LUL196	20C TEE 600W SS316
LEL199	20C TEE 900W HDG	LUL199	20C TEE 900W SS316

Unistrut Tee's are available in 300mm, 450mm, 600mm and 900mm radiuses.
At the end of the standard part number you will need to indicate the radius you require.

For example: if you require a HDG Tee with a width of 150mm [W] a radius of 600mm [R], the part number would be as follows.

LEL191R6

20B – 20C FLAT COVERS
TRUGALV®



PART NUMBER	DESCRIPTION	Nom Width mm	Actual Width mm	L
4033142	LEK6013TGF 20B/20C FLAT CVR 215W 3M TGF	150	215	
4033143	LEK6033TGF 20B/20C FLAT CVR 365W 3M TGF	300	365	
4033144	LEK6043TGF 20B/20C FLAT CVR 515W 3M TGF	450	515	
4033145	LEK6063TGF 20B/20C FLAT CVR 665W 3M TGF	600	665	

MATERIAL THICKNESS 0.7mm

FLAT COVERS

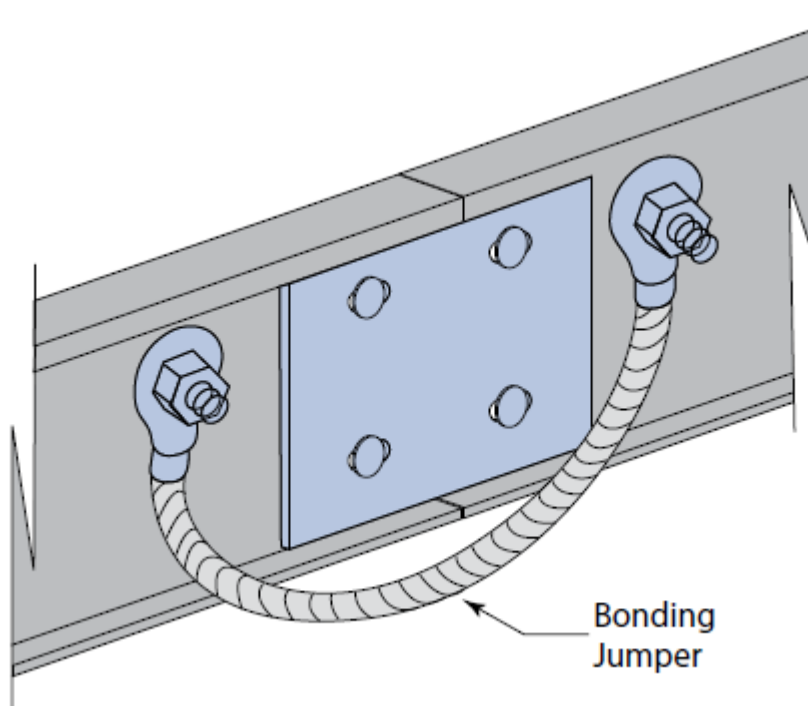
The use of flat covers ensures maximum protection for cables.

FINISH

Unistrut's newest cover finish, TG (TRUEGALV®), provides a sleek surface that eliminates the typical bumps and protrusions found in the HG finish.

UNISEARCH, an independent entity, has verified that our TG finish is comparable to the conventional Hot Dip Galvanizing process.

EARTH KIT



EARTH KIT

Part Number: LEMES35K

35mm² 440L with M10 Lug.

Supplied with M10 fasteners for installation

TECH DATA SHEET

12B LADDER HOT DIPPED GALVANISED & STAINLESS STEEL GRADE 316

TECHNICAL DATA

Cable Laying Depth: 44mm

Loading Data:

Basic Load Capacity
112kg/lin.m on 3.6m span

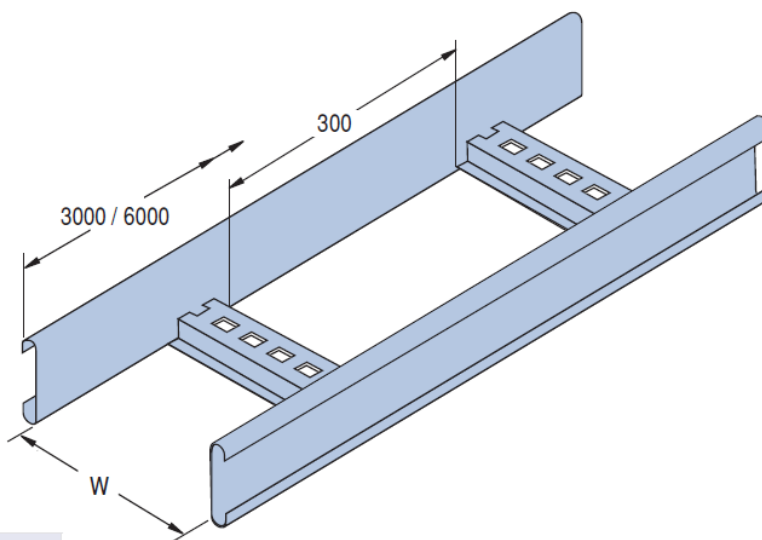
Length: 4m & 6m

Rung Spacing: 300mm nominal

Standard Finish: Hot Dipped Galvanised

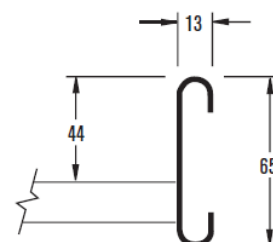
Also available in Stainless Steel

(3m length, part no. LUE)



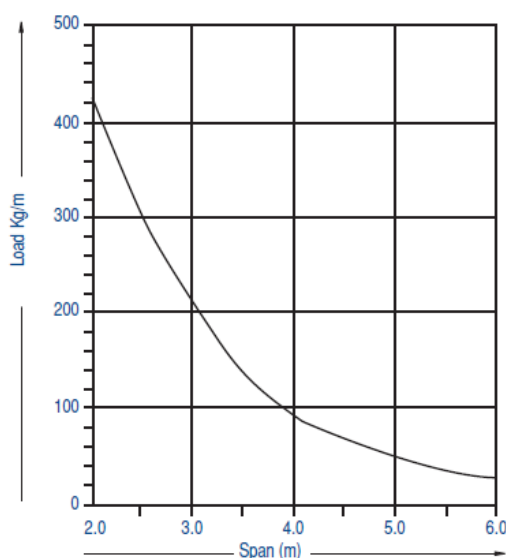
PARTS LIST

Dim "W"	Type	Part No HG 4m	Part No HG 6m	Part No 316 SS 3m	Part No 316 SS 6m
150	12B	LEE101	LEE1016	LUE1013	LUE1016
300	12B	LEE103	LEE1036	LUE1033	LUE1036
450	12B	LEE104	LEE1046	LUE1043	LUE1046
600	12B	LEE106	LEE1066	LUE1063	LUE1066



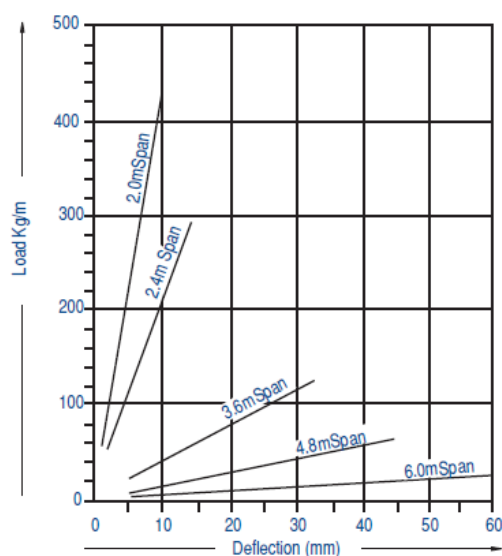
* Splice plate & fixing screws are not included (order separately).

Allowable Load Graph



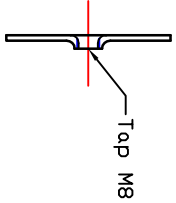
Allowable loads are determined generally in accordance with NEMA Standard VE1 and verified by testing.
Safety Factor = 1.5 on collapse load for single span.

Deflection Graph



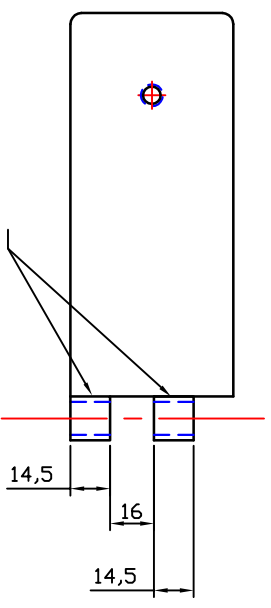
Deflections shown apply to the end-bays (ie. worst case) of a continuous ladder run. To find deflection of a single span, multiply by 2.5.

Dimensions in Millimetres
Do not scale.



A

M10 Nut and Bolt 75 long HG ✓ Plain steel tube 16OD x 12ID x 14.5



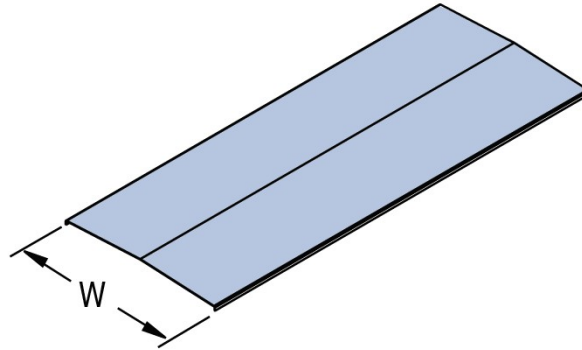
Fillet weld both sides
Common Half

Weight assembled & HDG 0.38kg

<u>SAP Number</u>	<u>Steel</u>	<u>Code</u>	<u>Finish</u>
4000779	GZ 275	GB	Galvabond
4000488	316-SS	SS	Mill Finish
	AS 3679-300	HG	Hot Dip to FIN002
	GZ 275	PT	Paint / Power coat
	AS 3679-300	ZA	Zinc Plated to FIN003

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DATE	REF	REVISION	BY				
				12B HINGED HORIZ. SPLICE			
				LEE35			
29.4.21	REV c	COMMON HALF NOT ADDED	GG	DRAWN	CHECKED	SCALE	DRAWING No
9.3.04		Steel tube 14 to 14.5 long	JB	J.BUGH		1:2 A3	4000488

12B STANDARD COVERS



GRADE 316 SS

PART NUMBER	DESCRIPTION	Nom Width mm	Actual Width mm	Length M
4008959	LUE6013SS 12B/UT STNDARD CVR 176W 3M SS	150	176	3m
4008961	LUE6033SS 12B/UT STNDARD CVR 326W 3M SS	300	326	3m
4008963	LUE6043SS 12B/UT STNDARD CVR 476W 3M SS	450	476	3m
4008965	LUE6063SS 12B/UT STNDARD CVR 626W 3M SS	600	626	3m

MATERIAL THICKNESS 0.7mm

STANDARD COVERS

The most common type used and allows for maximum protection to cables. The standard cover has a 3-5° crease for added rigidity and moisture run-off.

FINISH

The 316 GRADE SS is Unistrut's latest finish for covers. It offers a smooth 2b finish

NEMA 16A CABLE LADDER - STEEL

TECHNICAL DATA

Cable Laying Depth: 72mm

Loading Data:

Basic Load Capacity

64kg/lin.m on 6m span

90kg/lin.m on 4.8m span

230kg/lin.m on 3m span

Length: 6m

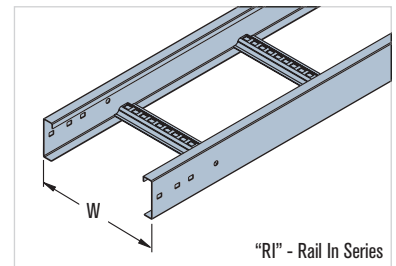
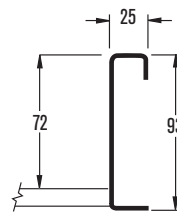
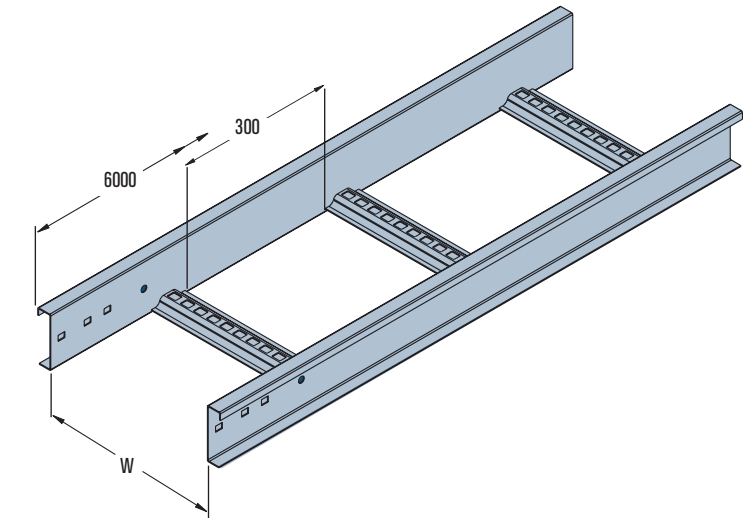
Rung Spacing: 300mm nominal

Standard Finish: Hot Dipped Galvanised

Also available in Stainless Steel Grade 316

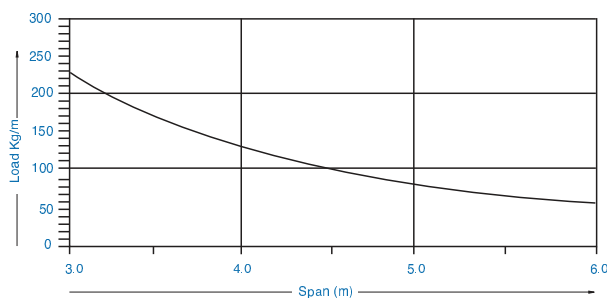
PARTS LIST

Dim "W"	Type	Part No. HG	Part No. 316 SS
150	16A	LEG101	LUG101
300	16A	LEG103	LUG103
450	16A	LEG104	LUG104
600	16A	LEG106	LUG106
150	16A-RI	LEG101R	LUG101R
300	16A-RI	LEG103R	LUG103R
450	16A-RI	LEG104R	LUG104R
600	16A-RI	LEG106R	LUG106R



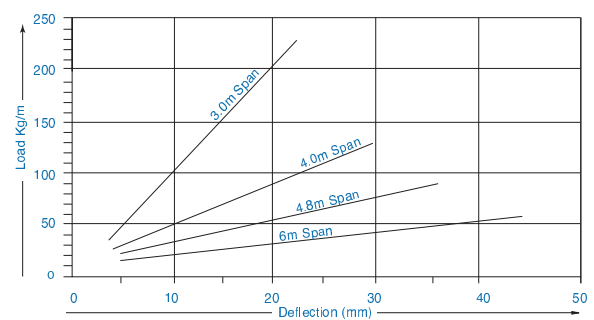
* Splice plate & fixing screws are not included (order separately).

ALLOWABLE LOAD GRAPH



Allowable loads are determined generally in accordance with NEMA Standard VE1 and verified by testing. Safety Factor = 1.5 on collapse load for single span.

DEFLECTION GRAPH



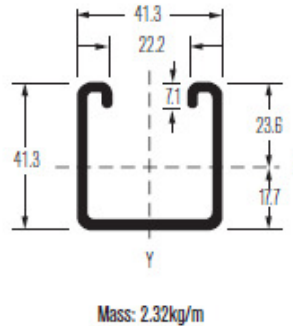
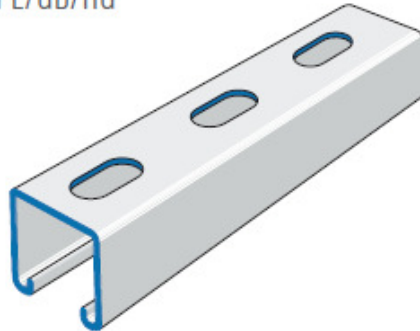
Deflections shown apply to the end-bays (ie. worst case) of a continuous ladder run. To find deflection of a single span, multiply by 2.5.

TECH DATA SHEET P1000T STRUT

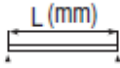


P1000T

PL/GB/HG

Slots 14 wide x 28 long
at 50mm centres (approx.)



A	-	295mm ²
kg/m	-	2.32kg/m
I _{x-x}	=	0.059 10 ⁶ mm ⁴
Z _{x-x}	=	2.698 10 ³ mm ³
r _{x-x}	=	14.1mm
I _{y-y}	=	0.091 10 ⁶ mm ⁴
Z _{y-y}	=	4.423 10 ³ mm ³
r _{y-y}	=	17.6mm

 L (mm)	F _{max} (kN)	 f _{max} (mm)	 F (kN)
250	13.35	0.20	40.96
500	6.68	0.78	33.16
750	4.45	1.77	25.40
1000	3.34	3.15	19.30
1250	2.67	4.91	14.78
1500	2.22	7.08	11.88
1750	1.91 (2)	9.64	9.90
2000	1.66 (2)	12.59	8.41
2250	1.48 (2)	15.93	7.24
2500	1.33 (2)	19.66	6.31
2750	1.21 (2)	23.80	5.53
3000	1.12 (2)	28.32	-

Note (2): For uniform beam working loads asymmetric sections are required to be adequately braced to prevent rotation and twist

Galvabond Strut - Input material is supplied by the steel mill generally in accordance with AS1397 having a coating class of Z275. The material is slit to width and roll formed to shape.

Hot Dipped Galvanised - Coatings are applied generally in accordance with AS/NZS4680. The thickness of the coating is dependent on the material thickness of the component being galvanised. It should be noted that due to the galvanising process the thickness of the coating will vary over the surface and should be taken into account during component assembly. It may be necessary to remove excess built-up prior to use.

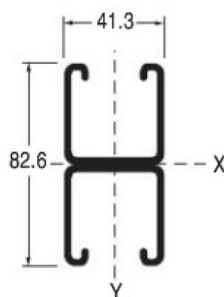
Ultimate load values have been calculated from the section properties as permitted by AS/NZS 4600 Cold Formed Steel Structures code. The guaranteed minimum yield stress F_y has been taken as 264MPa for plain channels, and the increase allowed resulting from cold forming has been determined in accordance with the code. The listed working loads have been derived from the ultimate load divided by 1.5.

TECHNICAL DATA SHEET P1001 COMBINATION CHANNEL

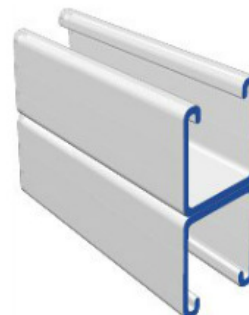
P1001 [GB/HG]



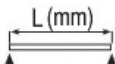
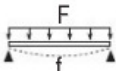

A	=	660mm ²
kg/m	=	5.32kg/m
I _{x-x}	=	0.318 10 ⁶ mm ⁴
Z _{x-x}	=	7.711 10 ³ mm ³
r _{x-x}	=	22.0mm
I _{y-y}	=	0.184 10 ⁶ mm ⁴
Z _{y-y}	=	8.902 10 ³ mm ³
r _{y-y}	=	16.7mm



Mass: 5.22kg/m



Part No.	Material Thickness	Length
P1001-GB	2.5mm	6m
P1001-HG	2.5mm	6m

	F _{max} (kN) 	f _{max} (mm)	F(kN) 
250	25.64 (1)	0.08	97.71
500	19.58	0.50	94.09
750	13.06	1.13	88.35
1000	9.79	2.00	80.90
1250	7.83	3.13	72.23
1500	6.53	4.50	62.89
1750	5.60 (2)	6.13	53.40
2000	4.90 (2)	8.01	44.21
2250	4.35 (2)	10.13	35.62
2500	3.92 (2)	12.51	28.85
2750	3.56 (2)	15.14	23.85
3000	3.26 (2)	18.02	20.04

Notes to Table

Note 1: Loads are governed by shear or web crippling.

Note 2: For uniform beam working loads asymmetric sections are required to be adequately braced to prevent rotation and twist

P1001 Combination Channel:

Material:

- Unistrut channels are accurately and carefully cold formed to size from low-carbon strip steel.
- All spot-welded combination members, except P1001T, are welded 3" (76 mm) maximum on center.
- **Steel: Plain** 2.5mm AS1594.
- **Steel: Pre-Galvanized** 2.4mm G2Z275
- **Steel: Stainless Steel Plain** 2.5mm GRADE 316.

Dimensions:

- Metric dimensions are shown in millimeters.

Curved Channel:

- Many Unistrut 41mm channel sections are available as curved pieces in both single and combination styles. Contact your local Unistrut Service Center or Unistrut Corporation for ordering information.

Standard Lengths:

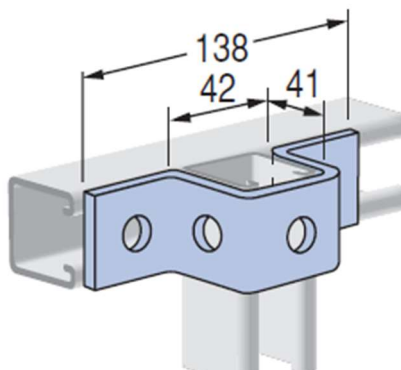
- Standard lengths are 6m. Tolerances are ± 3 mm to ± 13 mm to allow for cutting. Special lengths are available for a small cutting charge with a tolerance of ± 3 mm.

Load Data:

All beam and column load data pertains to carbon steel and stainless steel channels. Load tables and charts are constructed to be in accordance with the COLD-FORMED STEEL STRUCTURAL AS/NZS4600.

TECHNICAL DATA SHEET P1047SS U SHAPE FITTING

Mass: 30.9kg/100



Part No.	Finish	Description	Box/Bndl Qty
P1047SS	SS	U SHAPE FITTING	25

FITTINGS

The fittings, unless noted otherwise, are punch press formed from 5mm low carbon steel plates or strip.

FINISHES

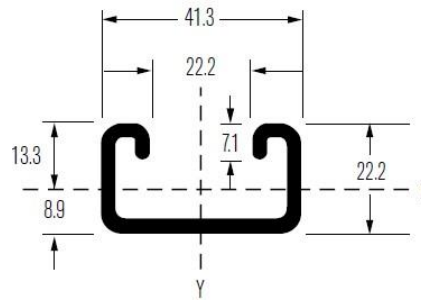
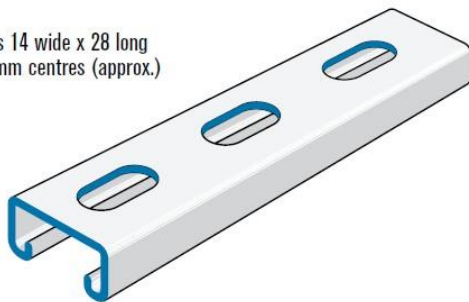
GRADE 316 STAINLESS STEEL

TECHNICAL DATA SHEET P3300T CHANNEL POWDER COATED (PC)

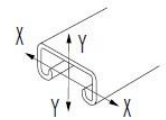
P3300T

PL/GB/HG/TG/SS

Slots 14 wide x 28 long
at 50mm centres (approx.)



Mass: 1.55kg/m



A	-	197mm ²
kg/m	-	1.55kg/m
I _{x-x}	=	0.011 10 ⁶ mm ⁴
Z _{x-x}	=	0.912 10 ³ mm ³
r _{x-x}	=	7.5mm
I _{y-y}	=	0.054 10 ⁶ mm ⁴
Z _{y-y}	=	2.634 10 ³ mm ³
r _{y-y}	=	16.6mm

L(mm)	F _{max} (kN)	f	f _{max} (mm)	F(kN)
250	4.97		0.38	31.39
500	2.48		1.51	24.98
750	1.66		3.41	17.48
1000	1.24		6.07	10.87
1250	0.99		9.48	7.11
1500	0.83		13.64	5.00
1750	0.71 (2)		18.57	-
2000	0.62 (2)		24.26	-
2250	0.55 (2)		30.70	-
2500	0.50 (2)		37.90	-
2750	0.45 (2)		45.86	-
3000	0.41 (2)		54.57	-

Material:

- Unistrut channels are accurately and carefully cold formed to size from low-carbon strip steel.
- **Steel: Plain (PL)** 2.5mm AS1594.
- **Steel: Pre-Galvanized (GB)** 2.4mm G2Z275
- **Steel: Hot Dipped Galvanised (HG)** 2.5mm
- **Steel: Trugalv (TG)** 2.5mm
- **Steel: Stainless Steel (SS)** 2.5mm Grade 316
- **Powder Coated to AS 4506—2005 Metal finishing—Thermoset powder coatings**

Dimensions:

- Metric dimensions are shown in millimeters.

Standard Lengths:

- Standard lengths are 6m. Tolerances are ±3 mm to ±13 mm to allow for cutting.
- Special lengths are available for a small cutting charge with a tolerance of ± 3 mm.

Load Data:

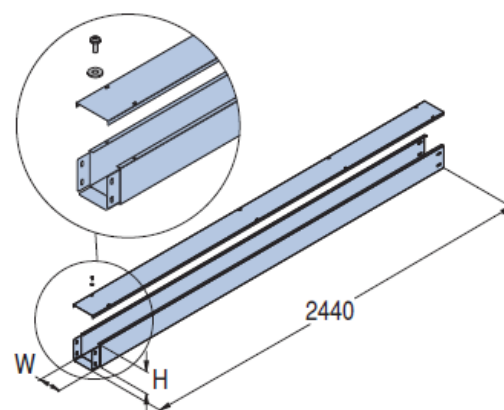
- All beam and column load data pertains to carbon steel and stainless steel channels. Load tables and charts are constructed to be in accordance with the COLD-FORMED STEEL STRUCTURAL AS/NZS4600.

TECHNICAL DATA SHEET CABLE DUCT TRUNKING PRE GAL (GB) FINISH

Unistrut Cable duct range is made from sturdy 0.7mm pre galvanised steel. Available in a range of sizes all with screw down covers and 2400mm in length the straight runs come with built in Joining hardware. Also available in the range are standard risers, tees, elbows and crosses. All products can be made to order in special paint finishes.

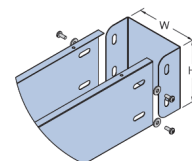
CABLE DUCT STRAIGHT LENGTH

Part No.	Width	Height	Length
UD5050GB	50mm	50mm	2440mm
UD7575GB	75mm	75mm	2440mm
UD10050GB	100mm	50mm	2440mm
UD100100GB	100mm	100mm	2440mm
UD150100GB	150mm	100mm	2440mm
UD150150GB	150mm	150mm	2440mm



CABLE DUCT END CAP

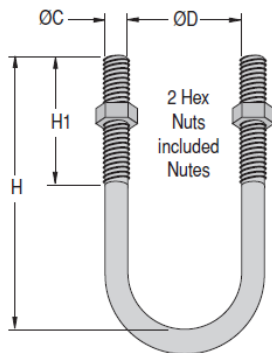
Part No.	Width	Height
UDEC5050GB	50mm	50mm
UDEC7575GB	75mm	75mm
UDEC10050GB	100mm	50mm
UDEC100100GB	100mm	100mm
UDEC150100GB	150mm	100mm
UDEC150150GB	150mm	150mm



Use when cutting straight lengths for splicing

TECH DATA SHEET

UN14 SERIES U BOLTS



Standard Finish: Hot Dipped Galvanised
Material Grade: 432MPa

Part No	ØD	H mm	H1 mm	ØC mm	kg
UN14-021	21	65	50	10	0.09
UN14-027	27	77	50	10	0.10
UN14-034	34	85	50	10	0.12
UN14-043	43	93	50	10	0.13
UN14-048	48	100	50	10	0.14
UN14-051	51	103	50	10	0.14
UN14-060	60	110	50	10	0.16
UN14-076	76	127	50	12	0.28
UN14-089	89	140	50	12	0.30
UN14-102	102	152	50	12	0.35
UN14-114	114	165	50	12	0.38
UN14-140	140	190	50	12	0.40
UN14-165	165	215	50	12	0.44
UN14-168	168	220	50	12	0.48
UN14-219	219	295	75	16	1.13
UN14-273	273	370	100	20	2.20
UN14-324	324	420	100	20	2.52
UN14-356	356	455	100	20	2.74
UN14-406	406	505	100	20	3.05
UN14-457	457	555	100	24	4.87
UN14-508	508	605	100	24	5.32
UN14-610	610	710	100	24	6.28

UNISTRUT®

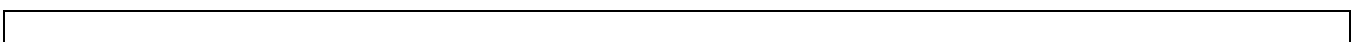
A BRAND OF  **atkore**
INTERNATIONAL

Customer service center

Phone: 1300 725 877

Fax: 1300 112 300

www.unistrut.com.au



UNISTRUT®

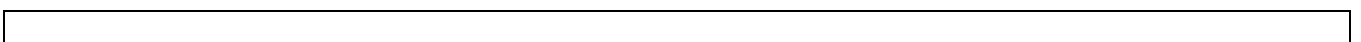
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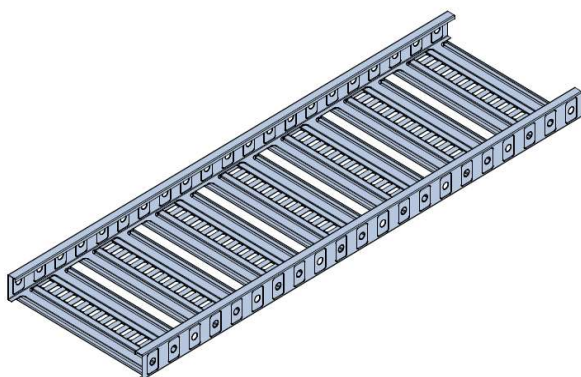
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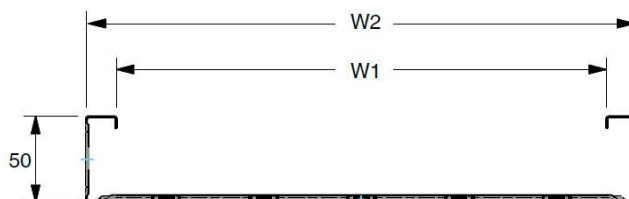
TECH DATA SHEET

UT3 UNITRAY GRADE 316SS



Finishes:

Grade 316 Stainless Steel



MATERIAL PART NUMBER	PART DESCRIPTION	HEIGHT	W1 NOMINAL WIDTH	W2 OVERALL WIDTH	LENGTH
4036921	UT3-150SS	50mm	150mm	172mm	3000mm
4036922	UT3-300SS	50mm	300mm	322mm	3000mm
4038480	UT3-450SS	50mm	450mm	472mm	3000mm
4038481	UT3-600SS	50mm	600mm	622mm	3000mm

Basic load
90kgs/linear
meter on 1.5m
span.

Material
Thickness
0.7mm BMT

NOTE: The deflections have been provided as a guide based on CONTINUOUS spans.

Deflections mm	10mm	20mm	25mm	35mm
Span 1.5 meters				
Span 2.0 meters				
Span 2.4 meters				
Span 3.0 meters				
Allowable Load	90kg/m	57kg/m	48kg/m	20kg/m